WHAT IS CLAIMED IS:

1. A method of ablating a material, the method comprising:

(a) generating a beam of laser radiation in a form of plurality of pulses, said laser radiation having a wavelength suitable for ablating the material; and

(b) within a duration of a pulse of said plurality of pulses, scanning the material by said beam, so as to transfer a predetermined amount of energy to each one of a plurality of locations of the material, said predetermined amount of energy being selected so as to ablate the material.

2. The method of claim 1, wherein said scanning is characterized by at least one scanning-parameter, said at least one scanning-parameter is selected from the group consisting of a scanning-frequency, a scanning-velocity, a scanning-acceleration, a scanning-amplitude, a scanning-angle, a scanning-pattern and a scanning-duration.

3. The method of claim 1, wherein said scanning is selected from the group consisting of a one-dimensional scanning, a two-dimensional scanning and a three-dimensional scanning.

4. The method of claim 2, wherein said at least one scanning-parameter is selected so as to minimize heating of internal layers of the material.

5. The method of claim 2, wherein said at least one scanning-parameter is selected so as to minimize debris screening.

6. The method of claim 2, wherein said at least one scanning-parameter is selected so as to minimize shifts in an absorption curve of at least one component present in the material.

7. The method of claim 2, wherein said at least one scanning-parameter is selected so as to allow ablation of substantially large areas of the material.

8. The method of claim 1, wherein said laser radiation has a power sufficient for ablation of substantially large areas of the material.

9. The method of claim 1, wherein said duration of said pulse is selected so as to allow ablation of substantially large areas of the material.

10. The method of claim 2, wherein said at least one scanning-parameter is selected so as to provide a predetermined ablation pattern.

11. The method of claim 10, wherein said predetermined ablation pattern is selected from the group consisting of a repetitive pattern, a cylindrical pattern and an irregular pattern.

12. The method of claim 2, wherein said at least one scanning-parameter is selected so as to compensate spatial non-uniformities of intensity distribution of said laser radiation.

13. The method of claim 12, wherein said compensating said spatial non-uniformities of said intensity distribution is by rotating said beam about a longitudinal axis.

14. The method of claim 12, wherein said compensating said spatial non-uniformities of said intensity distribution is by positioning an optical element in a light-path of said beam and rotating said optical element about a longitudinal axis.

15. The method of claim 12, wherein said compensating said spatial non-uniformities of said intensity distribution is by positioning a passive beam homogenizer in the light path of the beam.

16. The method of claim 14, wherein said optical element is selected from the group consisting of a lens, a mirror and a prism.

17. The method of claim 2, wherein said at least one scanning-parameter is selected so as to compensate transient non-uniformities of intensity distribution of said laser radiation within said duration of said pulse.

18. The method of claim 17, wherein said compensating said transient non-uniformities of said intensity distribution is by selecting said scanning-velocity inversely proportional to said intensity distribution.

19. The method of claim 2, wherein said at least one scanning-parameter is selected so as to compensate flux non-uniformities caused by different impinging angles of said beam on said plurality of locations of the material.

20. The method of claim 2, wherein said compensating said flux non-uniformities is by selecting said scanning-velocity to be small for large impinging angles and large for small impinging angles, said large impinging angles and said small impinging angles being measured relative to an imaginary line positioned normal to the material.

21. The method of claim 2, wherein said scanning is by dynamically diverting said beam, so as to provide a substantially constant impinging angle of said beam on each of said plurality of locations of the material.

22. The method of claim 1, wherein the material is a hard material.

23. The method of claim 1, wherein the material is a hard tissue.

24. The method of claim 1, wherein the material has no more than 30 % by weight water content.

25. The method of claim 1, wherein the material is selected from the group consisting of enamel, dentin and bone tissue.

26. The method of claim 2, wherein the material forms a part of a tooth of a human.

27. The method of claim 2, wherein the material forms a part of a tooth of an animal.

28. The method of claim 26, wherein said at least one scanning-parameter, said duration of said pulse and said predetermined amount of energy are selected to perform a dental procedure.

29. The method of claim 28, wherein said dental procedure is selected from the group consisting of crown preparation, dental implantation, caries removal, endodontic treatment, bones surgery, enamel and dentin preparation and conditioning.

30. The method of claim 1, wherein said generating said beam of said laser radiation is by a laser device selected from the group consisting of an Er based laser device, a Ho:YAG laser device, a carbon-dioxide laser device, an Nd based laser device and a laser diode device.

31. The method of claim 30, wherein said Er based laser device is selected from the group consisting of an Er:YAG laser device, Er:YSGG laser device and Er:glass laser device.

32. The method of claim 30, wherein said Nd based laser device is selected from the group consisting of an Nd:YAG laser device an Nd:YLF laser device and an Nd:glass laser device.

33. The method of claim 1, wherein said laser radiation is polarized.

34. The method of claim 1, wherein said wavelength is in an infrared scale.

35. The method of claim 1, wherein said wavelength is in an ultraviolet scale.

36. The method of claim 1, wherein said wavelength is in a visible light scale.

37. The method of claim 1, wherein said wavelength is a characteristic wavelength of an absorption curve of water.

38. The method of claim 1, wherein said wavelength is about 2.94 micrometers.

39. The method of claim 1, further comprising cooling the material during said scanning.

40. The method of claim 39, wherein said cooling is by a spray of liquid.

41. The method of claim 40, wherein said liquid is water.

42. The method of claim 40, wherein said liquid is airflow.

43. The method of claim 41, further comprising continuously determining at least one impinging-parameter of said beam on the material.

44. The method of claim 43, wherein said at least one impinging-parameter is selected from the group consisting of an impinging-location and an impinging-angle.

45. The method of claim 43, wherein said continuously determining said at least one impinging parameter is by an additional laser beam.

46. The method of claim 45, wherein said additional laser beam is characterized by a wavelength selected so as not to damage the material.

47. The method of claim 43, further comprising terminating said laser radiation if said at least one impinging-parameter is in a predetermined risk range.

48. The method of claim 1, further comprising focusing said beam on a surface of the material using at least one focusing element.

49. An apparatus for scanning a material by a beam of laser radiation being in a form of plurality of pulses, the apparatus comprising a scanning assembly for dynamically diverting the beam, within a duration of a pulse of the plurality of pulses, so as to transfer a predetermined amount of energy to each one of a plurality of locations of the material, thereby to scan the material by the beam.

50. The apparatus of claim 49, further comprising a synchronizer for synchronizing said scanning assembly and a laser device generating the beam.

51. The apparatus of claim 49, wherein said synchronizer is selected from the group consisting of an optical synchronizer and an electrical synchronizer.

52. The apparatus of claim 49, wherein said scanning assembly comprises at least one optical element positioned in a light-path of the beam, said at least one optical element being operable to rotate thereby to dynamically divert the beam.

53. The apparatus of claim 52, wherein said at least one optical element is selected from the group consisting of a lens, a mirror and a prism.

54. The apparatus of claim 50, wherein said scanning assembly is operable to preserve a substantially constant impinging angle of the beam on each of said plurality of locations of the material.

55. The apparatus of claim 49, wherein said scanning assembly is operable to generate scanning which is selected from the group consisting of a one-dimensional scanning, a two-dimensional scanning and a three-dimensional scanning.

56. The apparatus of claim 49, wherein said scanning assembly is designed and constructed to scan substantially large areas of the material.

57. The apparatus of claim 49, wherein said scanning assembly is designed and constructed to generate a predetermined scanning pattern.

58. The apparatus of claim 49, wherein said scanning assembly is designed and constructed to scan the material in such a manner that spatial non-uniformities of intensity distribution of the laser radiation are compensated.

59. The apparatus of claim 58, further comprising an optical element positioned in a light-path of the beam and operable to rotate about a longitudinal axis so that the beam is rotated about said longitudinal axis, hence compensating said spatial non-uniformities of said intensity distribution.

60. The apparatus of claim 59, wherein said optical element is selected from the group consisting of a lens, a mirror and a prism.

61. The apparatus of claim 49, wherein said scanning assembly is designed and constructed to scan the material in such a manner that transient non-uniformities of intensity distribution of the laser radiation within said duration of said pulse are compensated.

62. The apparatus of claim 61, wherein said scanning assembly is operable to provide a scanning-velocity which is inversely proportional to said intensity distribution, thereby to compensate said transient non-uniformities of said intensity distribution.

63. The apparatus of claim 49, wherein said scanning assembly is designed and constructed to scan the material in such a manner that flux non-uniformities, caused by different impinging angles of the beam on said plurality of locations of the material, are compensated.

64. The apparatus of claim 49, wherein said scanning assembly is operable to provide a small scanning-velocity for large impinging angles and a large scanning-velocity for small impinging angles, thereby to compensate said flux non-uniformities,

said large impinging angles and said small impinging angles being measured relative to a normal to the material.

65. The apparatus of claim 49, further comprising an arm interface for mounting said scanning assembly to an articulated arm.

66. The apparatus of claim 49, further comprising a handpiece, hingedly attached to said scanning assembly and operable to rotate to a plurality of open positions, said handpiece being capable of guiding the beam therethrough in each one of said plurality of open positions.

67. The apparatus of claim 50, further comprising a light collector for collecting said additional laser beam when said additional laser beam is reflected from the material, thereby to determine at least one impinging-parameter of said beam on the material.

68. The apparatus of claim 67, further comprising at least one waveguide and an additional synchronizer communicating with said laser device, said at least one waveguide being designed and constructed for directing said additional laser beam to said additional synchronizer, and said additional synchronizer being designed and constructed to synchronize said laser device and said additional laser beam.

69. A system for ablating a material, the system comprising:

(a) a laser device for generating a beam of laser radiation in a form of plurality of pulses, said laser radiation having a wavelength suitable for ablating the material; and

(b) a scanning assembly, electrically communicating with said laser device, said scanning assembly being capable of scanning the material by said beam, within a duration of a pulse of said plurality of pulses, so as to transfer a predetermined amount of energy to each one of a plurality of locations of the material, said predetermined amount of energy being selected so as to ablate the material.

70. The system of claim 69, wherein said scanning assembly comprises a synchronizer for synchronizing said scanning assembly and said laser device.

71. The system of claim 70, wherein said synchronizer is selected from the group consisting of an optical synchronizer and an electrical synchronizer.

72. The system of claim 69, wherein said scanning assembly is operable to dynamically divert said beam thereby to scan the material by the beam.

73. The system of claim 72, wherein said scanning assembly comprises at least one optical element positioned in a light-path of said beam, said at least one optical element being operable to rotate thereby to dynamically divert said beam.

74. The system of claim 73, wherein said at least one optical element is selected from the group consisting of a lens, a mirror and a prism.

75. The system of claim 72, wherein said scanning assembly is operable to preserve a substantially constant impinging angle of the beam on each of said plurality of locations of the material.

76. The system of claim 69, wherein said scanning assembly is operable to generate scanning which is selected from the group consisting of a one-dimensional scanning, a two-dimensional scanning and a three-dimensional scanning.

77. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that heating of internal layers of the material is minimized.

78. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that debris screening is minimized.

79. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that shifts in an absorption curve of at least one component present in the material are minimized.

80. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that substantially large areas of the material are ablated.

81. The system of claim 69, wherein said laser device is designed and constructed to generate laser radiation having a power sufficient for ablation of substantially large areas of the material.

82. The system of claim 69, wherein said laser device is designed and constructed so that said duration of said pulse is sufficient for allowing ablation of substantially large areas of the material.

83. The system of claim 69, wherein said scanning assembly is designed and constructed to generate a predetermined ablation pattern.

84. The system of claim 83, wherein said predetermined ablation pattern is selected from the group consisting of a repetitive pattern, a cylindrical pattern and an irregular pattern.

85. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that spatial non-uniformities of intensity distribution of said laser radiation are compensated.

86. The system of claim 85, wherein said scanning assembly comprises an optical element positioned in a light-path of said beam and operable to rotate about a longitudinal axis so that said beam is rotated about said longitudinal axis, hence compensating said spatial non-uniformities of said intensity distribution.

87. The system of claim 86, wherein said optical element is selected from the group consisting of a lens, a mirror and a prism.

88. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that transient non-uniformities of intensity distribution of said laser radiation within said duration of said pulse are compensated.

89. The system of claim 88, wherein said scanning assembly is operable to provide a scanning-velocity which is inversely proportional to said intensity distribution, thereby to compensate said transient non-uniformities of said intensity distribution.

90. The system of claim 69, wherein said scanning assembly is designed and constructed to scan the material in such a manner that flux non-uniformities, caused by different impinging angles of said beam on said plurality of locations of the material, are compensated.

91. The system of claim 69, wherein said scanning assembly is operable to provide a small scanning-velocity for large impinging angles and a large scanning-velocity for small impinging angles, thereby to compensate said flux non-uniformities, said large impinging angles and said small impinging angles being measured relative to a normal to the material.

92. The system of claim 69, wherein the material is a hard material.

93. The system of claim 69, wherein the material is a hard tissue.

94. The system of claim 69, wherein the material has no more than 30 % by weight water content.

95. The system of claim 69, wherein the material is selected from the group consisting of enamel, dentin and bone.

96. The system of claim 69, wherein the material forms a part of a tooth of a human.

97. The system of claim 69, wherein the material forms a part of a tooth of an animal.

98. The system of claim 69, further comprising at least one articulated arm onto which said scanning assembly is mounted, said at least one articulated arm and said scanning assembly are constructed and designed to operate within or adjacent to an oral cavity.

99. The system of claim 98, further comprising a handpiece, hingedly attached to said scanning assembly and operable to rotate to a plurality of open positions, said handpiece being capable of guiding the beam therethrough in each one of said plurality of open positions.

100. The system of claim 69, further comprising a user interface device electrically communicating with said scanning assembly and capable of transmitting scanning-parameters to said scanning assembly.

101. The system of claim 69, wherein said generating said beam of said laser radiation is by a laser device selected from the group consisting of an Er based laser device, a Ho:YAG laser device, a carbon-dioxide laser device, an Nd based laser device and a laser diode device.

102. The system of claim 101, wherein said Er based laser device is selected from the group consisting of an Er:YAG laser device, Er:YSGG laser device and Er:glass laser device.

103. The system of claim 101, wherein said Nd based laser device is selected from the group consisting of an Nd:YAG laser device an Nd:YLF laser device and an Nd:glass laser device.

104. The system of claim 1, wherein said laser radiation is polarized.

105. The system of claim 69, wherein said wavelength is in an infrared scale.

106. The system of claim 69, wherein said wavelength is in an ultraviolet scale.

107. The system of claim 69, wherein said wavelength is in a visible light scale.

108. The system of claim 69, wherein said wavelength is a characteristic wavelength of an absorption curve of water.

109. The system of claim 69, wherein said wavelength is about 2.94 micrometers.

110. The system of claim 69, further comprising a cooling apparatus.

111. The system of claim 110, wherein said cooling apparatus is a liquid sprayer.

112. The system of claim 111, wherein said liquid is water.

113. The system of claim 111, wherein said liquid is airflow.

114. The system of claim 112, further comprising a mechanism for continuously determining at least one impinging-parameter of said beam on the material.

115. The system of claim 114, wherein said at least one impinging-parameter is selected from the group consisting of an impinging-location and an impinging-angle.

116. The system of claim 114, wherein said mechanism for said continuously determining said at least one impinging-parameter is an additional laser device.

117. The system of claim 70, further comprising an additional laser device for generating an additional laser beam.

118. The system of claim 117, further comprising a light collector for collecting said additional laser beam when said additional laser beam is reflected from the material, thereby to determine at least one impinging-parameter of said beam on the material.

119. The system of claim 118, further comprising at least one waveguide and an additional synchronizer communicating with said laser device, said at least one waveguide being designed and constructed for directing said additional laser beam to said additional synchronizer, and said additional synchronizer being designed and constructed to synchronize said laser device and said additional laser beam.

120. A method of crowning a tooth, the method comprising:

(a) generating a beam of laser radiation in a form of plurality of pulses, said laser radiation having a wavelength suitable for ablating the tooth;

(b) within a duration of a pulse of said plurality of pulses, scanning the tooth by said beam, so as to transfer a predetermined amount of energy to each one of a plurality of locations of the tooth, said predetermined amount of energy being selected so as to ablate the tooth;

(c) repeating said step (b) a number of times which is required to ablate an external surface of the tooth, thereby revealing a reduced surface of the tooth; and

(d) providing a crown having an inner surface geometrically compatible with said reduced surface of the tooth, and attaching said crown onto the tooth.

121. The method of claim 120, wherein the tooth is a tooth of a human.

122. The method of claim 120, wherein the tooth is a tooth of an animal.

123. The method of claim 120, wherein said scanning is characterized by at least one scanning-parameter, said at least one scanning-parameter being selected from the group consisting of a scanning-frequency, a scanning-velocity, a scanning-acceleration, a scanning-amplitude, a scanning-angle, a scanning-pattern and a scanning-duration.

124. The method of claim 123, wherein said at least one scanning-parameter is selected so as to minimize heating of internal layers of the tooth.

125. The method of claim 123, wherein said at least one scanning-parameter is selected so as to minimize debris screening.

126. The method of claim 123, wherein said at least one scanning-parameter is selected so as to minimize shifts in an absorption curve of at least one component present in the tooth.

127. The method of claim 123, wherein said at least one scanning-parameter is selected so as to allow ablation of substantially large areas of the tooth.

128. The method of claim 120, wherein said laser radiation has a power sufficient for ablation of substantially large areas of the tooth.

129. The method of claim 120, wherein said duration of said pulse is selected so as to allow ablation of substantially large areas of the tooth.

130. The method of claim 123, wherein said at least one scanning-parameter is selected so as to provide a predetermined ablation pattern.

131. The method of claim 130, wherein said predetermined ablation pattern is selected from the group consisting of a repetitive pattern, a cylindrical pattern and an irregular pattern.

132. The method of claim 123, wherein said at least one scanning-parameter is selected so as to compensate spatial non-uniformities of intensity distribution of said laser radiation.

133. The method of claim 132, wherein said compensating said spatial non-uniformities of said intensity distribution is by rotating said beam about a longitudinal axis.

134. The method of claim 132, wherein said compensating said spatial non-uniformities of said intensity distribution is by positioning an optical element in a light-path of said beam and rotating said optical element about a longitudinal axis.

135. The method of claim 132, wherein said compensating said spatial non-uniformities of said intensity distribution is by positioning a passive beam homogenizer in the light path of the beam.

136. The method of claim 134, wherein said optical element is selected from the group consisting of a lens, a mirror and a prism.

137. The method of claim 123, wherein said at least one scanning-parameter is selected so as to compensate transient non-uniformities of intensity distribution of said laser radiation within said duration of said pulse.

138. The method of claim 137, wherein said compensating said transient non-uniformities of said intensity distribution is by selecting said scanning-velocity to be inversely proportional to said intensity distribution.

139. The method of claim 123, wherein said at least one scanning-parameter is selected so as to compensate flux non-uniformities caused by different impinging angles of said beam on said plurality of locations of the tooth.

140. The method of claim 123, wherein said compensating said flux non-uniformities is by selecting said scanning-velocity to be small for large impinging angles and large for small impinging angles, said large impinging angles and said small impinging angles being measured relative to a normal to the tooth.

141. The method of claim 123, wherein said scanning is by dynamically diverting said beam, so as to provide a substantially constant impinging angle of said beam on each of said plurality of locations of the tooth.

142. The method of claim 123, wherein said generating said beam of said laser radiation is by a laser device selected from the group consisting of an Er based laser device, a Ho:YAG laser device, a carbon-dioxide laser device, an Nd based laser device and a laser diode device.

143. The method of claim 142, wherein said Er based laser device is selected from the group consisting of an Er:YAG laser device, Er:YSGG laser device and Er:glass laser device.

144. The method of claim 142, wherein said Nd based laser device is selected from the group consisting of an Nd:YAG laser device an Nd:YLF laser device and an Nd:glass laser device.

145. The method of claim 1, wherein said laser radiation is polarized.

146. The method of claim 120, wherein said wavelength is in an infrared scale.

147. The method of claim 120, wherein said wavelength is in an ultraviolet scale.

148. The method of claim 120, wherein said wavelength is in a visible scale.

149. The method of claim 120, wherein said wavelength is a characteristic wavelength of an absorption curve of water.

150. The method of claim 120, wherein said wavelength is about 2.94 micrometers.

151. The method of claim 120, further comprising cooling the tooth during said scanning.

152. The method of claim 151, wherein said cooling is by a spray of liquid.

153. The method of claim 152, wherein said liquid is water.

154. The method of claim 152, wherein said liquid is airflow.

155. The method of claim 153, further comprising continuously determining at least one impinging-parameter of said beam on the tooth.

156. The method of claim 155, wherein said at least one impinging-parameter is selected from the group consisting of an impinging-location and an impinging-angle.

157. The method of claim 155, wherein said continuously determining at least one impinging parameter is by an additional laser beam.

158. The method of claim 157, wherein said additional laser beam is characterized by a wavelength selected so as not to damage the tooth.

159. The method of claim 155, further comprising terminating said laser radiation if said at least one impinging-parameter is in a predetermined risk range.

160. The method of claim 120, further comprising focusing said beam on a surface of the tooth using at least one focusing element.

161. A method of treating a tumor in a bone, the method comprising:

(a) generating a beam of laser radiation in a form of plurality of pulses, said laser radiation having a wavelength suitable for ablating the bone; and

(b) within a duration of a pulse of said plurality of pulses, scanning the bone by said beam, so as to transfer a predetermined amount of energy to each one of a plurality of locations of the bone, said predetermined amount of energy being selected so as to ablate the tumor.

162. The method of claim 161, wherein said scanning is characterized by at least one scanning-parameter, said at least one scanning-parameter is selected from the group consisting of a scanning-frequency, a scanning-velocity, a scanning-acceleration, a scanning-amplitude, a scanning-angle, a scanning-pattern and a scanning-duration.

163. The method of claim 161, wherein said scanning is selected from the group consisting of a one-dimensional scanning, a two-dimensional scanning and a three-dimensional scanning.

164. The method of claim 162, wherein said at least one scanning-parameter is selected so as to minimize heating of internal layers of the bone.

165. The method of claim 162, wherein said at least one scanning-parameter is selected so as to minimize debris screening.

166. The method of claim 162, wherein said at least one scanning-parameter is selected so as to minimize shifts in an absorption curve of at least one component present in the bone.

167. The method of claim 162, wherein said at least one scanning-parameter is selected so as to allow ablation of substantially large areas of the bone.

168. The method of claim 161, wherein said laser radiation has a power sufficient for ablation of substantially large areas of the bone.

169. The method of claim 161, wherein said duration of said pulse is selected so as to allow ablation of substantially large areas of the bone.

170. The method of claim 162, wherein said at least one scanning-parameter is selected so as to provide a predetermined ablation pattern.

171. The method of claim 170, wherein said predetermined ablation pattern is selected from the group consisting of a repetitive pattern, a cylindrical pattern and an irregular pattern.

172. The method of claim 162, wherein said at least one scanning-parameter is selected so as to compensate spatial non-uniformities of intensity distribution of said laser radiation.

173. The method of claim 172, wherein said compensating said spatial non-uniformities of said intensity distribution is by rotating said beam about a longitudinal axis.

174. The method of claim 172, wherein said compensating said spatial non-uniformities of said intensity distribution is by positioning an optical element in a light-path of said beam and rotating said optical element about a longitudinal axis.

175. The method of claim 172, wherein said compensating said spatial non-uniformities of said intensity distribution is by positioning a passive beam homogenizer in the light path of the beam.

176. The method of claim 174, wherein said optical element is selected from the group consisting of a lens, a mirror and a prism.

177. The method of claim 162, wherein said at least one scanning-parameter is selected so as to compensate transient non-uniformities of intensity distribution of said laser radiation within said duration of said pulse.

178. The method of claim 177, wherein said compensating said transient non-uniformities of said intensity distribution is by selecting said scanning-velocity inversely proportional to said intensity distribution.

179. The method of claim 162, wherein said at least one scanning-parameter is selected so as to compensate flux non-uniformities caused by different impinging angles of said beam on said plurality of locations of the bone.

180. The method of claim 162, wherein said compensating said flux non-uniformities is by selecting said scanning-velocity to be small for large impinging angles and large for small impinging angles, said large impinging angles and said small impinging angles being measured relative to an imaginary line positioned normal to the bone.

181. The method of claim 162, wherein said scanning is by dynamically diverting said beam, so as to provide a substantially constant impinging angle of said beam on each of said plurality of locations of the bone.

182. The method of claim 162, wherein said at least one scanning-parameter, said duration of said pulse and said predetermined amount of energy are selected to perform a dental procedure.

183. The method of claim 182, wherein said dental procedure is selected from the group consisting of crown preparation, dental implantation, caries removal, endodontic treatment, bones surgery, enamel and dentin preparation and conditioning.

184. The method of claim 161, wherein said generating said beam of said laser radiation is by a laser device selected from the group consisting of an Er based laser device, a Ho:YAG laser device, a carbon-dioxide laser device, an Nd based laser device and a laser diode device.

185. The method of claim 184, wherein said Er based laser device is selected from the group consisting of an Er:YAG laser device, Er:YSGG laser device and Er:glass laser device.

186. The method of claim 184, wherein said Nd based laser device is selected from the group consisting of an Nd:YAG laser device an Nd:YLF laser device and an Nd:glass laser device.

187. The method of claim 161, wherein said laser radiation is polarized.

188. The method of claim 161, wherein said wavelength is in an infrared scale.

189. The method of claim 161, wherein said wavelength is in an ultraviolet scale.

190. The method of claim 161, wherein said wavelength is in a visible light scale.

191. The method of claim 161, wherein said wavelength is a characteristic wavelength of an absorption curve of water.

192. The method of claim 161, wherein said wavelength is about 2.94 micrometers.

193. The method of claim 161, further comprising cooling the bone during said scanning.

194. The method of claim 193, wherein said cooling is by a spray of liquid.

195. The method of claim 194, wherein said liquid is water.

196. The method of claim 194, wherein said liquid is airflow.

197. The method of claim 195, further comprising continuously determining at least one impinging-parameter of said beam on the bone.

198. The method of claim 197, wherein said at least one impinging-parameter is selected from the group consisting of an impinging-location and an impinging-angle.

199. The method of claim 197, wherein said continuously determining said at least one impinging parameter is by an additional laser beam.

200. The method of claim 199, wherein said additional laser beam is characterized by a wavelength selected so as not to damage the bone.

201. The method of claim 197, further comprising terminating said laser radiation if said at least one impinging-parameter is in a predetermined risk range.

202. The method of claim 161, further comprising focusing said beam on a surface of the bone using at least one focusing element.